

Abstract of the Disclosure

A multi-functional switch fabric apparatus and a control method for a multi-functional switch fabric apparatus are provided. The multi-functional switch fabric apparatus includes a plurality of input data processors, which copy, distribute, switch, and output input user data according to a mode set signal from the outside, a switch fabric unit, which includes a plurality of switching units and selectively outputs the user data input from the plurality of input data processors according to the mode set signal, a plurality of output data processors, which buffer, schedule, multiplex, and output the user data input from the switch fabric unit, and a control unit, which outputs the mode set signal to control the plurality of input data processors, the switch fabric unit, and the plurality of output data processors.